HW#97: Kites

Honors Geometry  
Due: Friday, March 18th, 2016

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP:\_\_\_\_\_

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| Objective | You will be able to identify which diagonal is bisected. | | |
| IDENTIFY BISECTING DIAGONALS Draw the diagonals of each rhombus and identify which one is bisected by annotating with congruent marks. | | | |
| 1. ../../../../../Desktop/Screen%20Shot%202016-03-06%20at%204.14.00%20PM | | 2. ../../../../../Desktop/Screen%20Shot%202016-03-06%20at%204.14.04%20PM | 3. ../../../../../Desktop/Screen%20Shot%202016-03-06%20at%204.14.15%20PM |
| 4. ../../../../../Desktop/Screen%20Shot%202016-03-06%20at%204.14.23%20PM | | 5.  ../../../../../Desktop/Screen%20Shot%202016-03-06%20at%204.14.28%20PM | 6. ../../../../../Desktop/Screen%20Shot%202016-03-06%20at%204.14.32%20PM |

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| Objective | YWBAT determine the angle measures given consecutive angles. | |
| 7. *WEST* is a kite. Find the measures of the missing angles.  a.  b. | | 8. Find the missing angles of each kite.  ../../../../../Desktop/Screen%20Shot%202016-03-06%20at%2010.26.09%20AM |

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| Objective | YWBAT find the perimeter and area of a kite. | |
| 9. Find the area of the kite below.    Perimeter =  Area = | | 10. Use the Pythagorean Theorem to find the side lengths of the kite. Find the perimeter, then find the area    Perimeter =  Area = |
| 11. In the kite below, PQ = 5 cm, PS = 5 cm, QS = 6 cm, and TR = 12 cm. What is the area of the kite?    Perimeter =  Area = | | 12. Find the perimeter and area of the kite.  9 cm  11 cm  8 cm  Perimeter =  Area = |
| 13. Find the are and perimeter of the kite.  ../../../../../Desktop/Screen%20Shot%202016-03-06%20at%2010.27.04%20AM  Perimeter =  Area = | | 14. Find the area and perimeter of the kite.  2.5 ft  5 ft  4.5 ft  Perimeter =  Area = |
| MIXED PROBLEMS & CHALLENGE PROBLEMS Complete the challenge problems below using what you know about the side, diagonal, and angle properites of kites. | | |
| 15. The length of one of the diagonals of a kite is 4 cm longer than twice the length of the other diagonal. The area of the kite is 15 cm2. Find the length of each diagonal.  Draw a picture: Find the length of each diagonal: | | |